



## Chapter 3. Access to Health Care

Many Americans have good access to health care that enables them to benefit fully from the Nation's health care system. However, others face barriers that make the acquisition of basic health care services a struggle. As demonstrated by extensive research and confirmed in the first National Healthcare Disparities Report (NHDR), racial and ethnic minorities and people of low socioeconomic status (SES) are disproportionately represented among those with access problems.

### Components of Health Care Access

- Access to health care means having “the timely use of personal health services to achieve the best health outcomes.”<sup>1</sup> Attaining good access to care requires three discrete steps:
- **Getting into the health care system**—People need to gain entry into the system in order to receive needed care.
- **Getting care within the health care system**—Once in the system, people need to go to sites of care where they can receive the specific services they need.
- **Finding providers who meet individual patient needs**—Once they identify appropriate sites of care, people need to find specific providers with whom they can develop a relationship based on mutual communication and trust.<sup>2</sup>

Health care access is measured in several ways including:

- **Structural measures**—Measures of the presence or absence of specific resources that enable health care, such as having health insurance or having a provider with hours on nights or weekends.
- **Patient assessments**—Measures of patients' perceptions of how well their providers interact with them.
- **Health care utilization**—Measures of the ultimate outcome of good access to care; i.e., the successful receipt of needed services.

### How This Chapter Is Organized

This chapter presents new information about disparities in access to health care in America. It is divided into four sections:

- Getting into the health care system
- Getting care within the health care system
- Patient perceptions of care
- Health care utilization

As in the 2003 NHDR, this chapter focuses on disparities in access to care related to race, ethnicity, and SES in the general U.S. population. Disparities in access to care within specific priority populations are found in Chapter 4, Priority Populations.

In addition to presenting new data, this chapter goes beyond last year's report and adds analyses of changes over time as well as some multivariate models and stratified analyses. To present this greater detail, the



sections of the chapter highlight a small number of measures, where applicable. Results for all measures are found in the summary tables at the end of the chapter.

The first NHDR included measures of cultural competency and health information. This year, new data on these topics are not available, so they are not discussed. New data on these topics are anticipated next year.

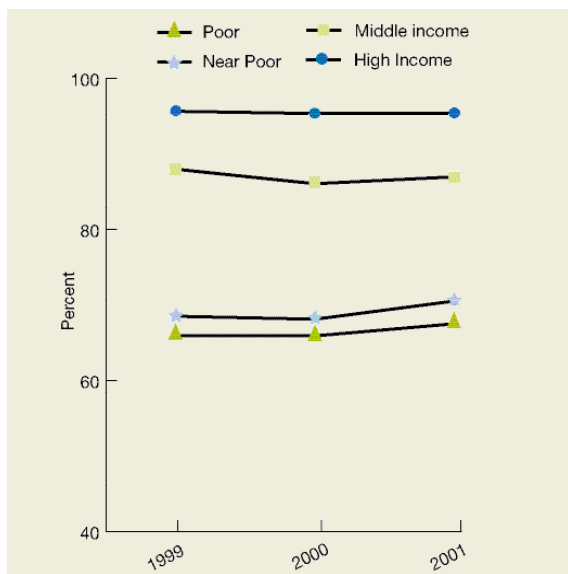
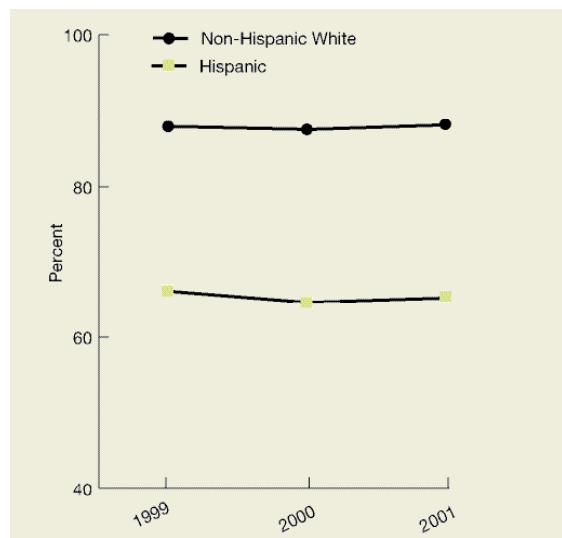
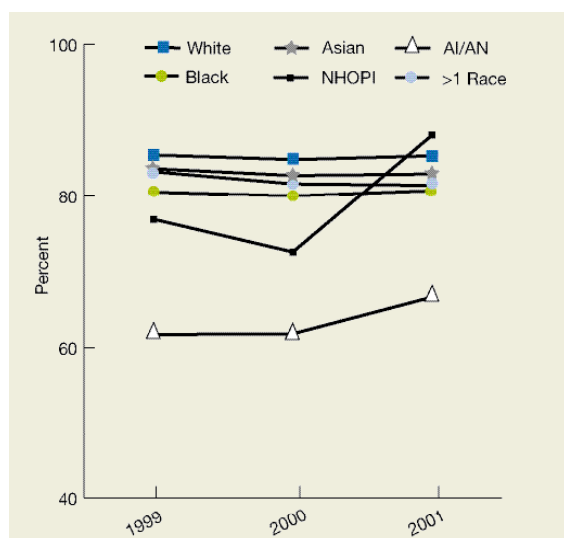


## Getting Into the Health Care System

### Health Insurance

Health insurance helps people get into the health care system. In 2002, 15.2% of Americans were uninsured.<sup>3</sup> The uninsured are more likely to die early<sup>4,5</sup> and have poor health status;<sup>6,7</sup> the costs of early death and poor health among the uninsured total \$65 billion to \$130 billion.<sup>8</sup> The uninsured report more problems getting care,<sup>9</sup> are diagnosed at later disease stages, and get less therapeutic care.<sup>10</sup> They are sicker when hospitalized and more likely to die during their stay.<sup>11</sup>

**Figure 3.1. People under age 65 with health insurance by race (top left), ethnicity (top right), and income (bottom left), 1999-2001**



**Source:** National Health Interview Survey, 1999-2001.

**Reference population:** Civilian, noninstitutionalized people under age 65.

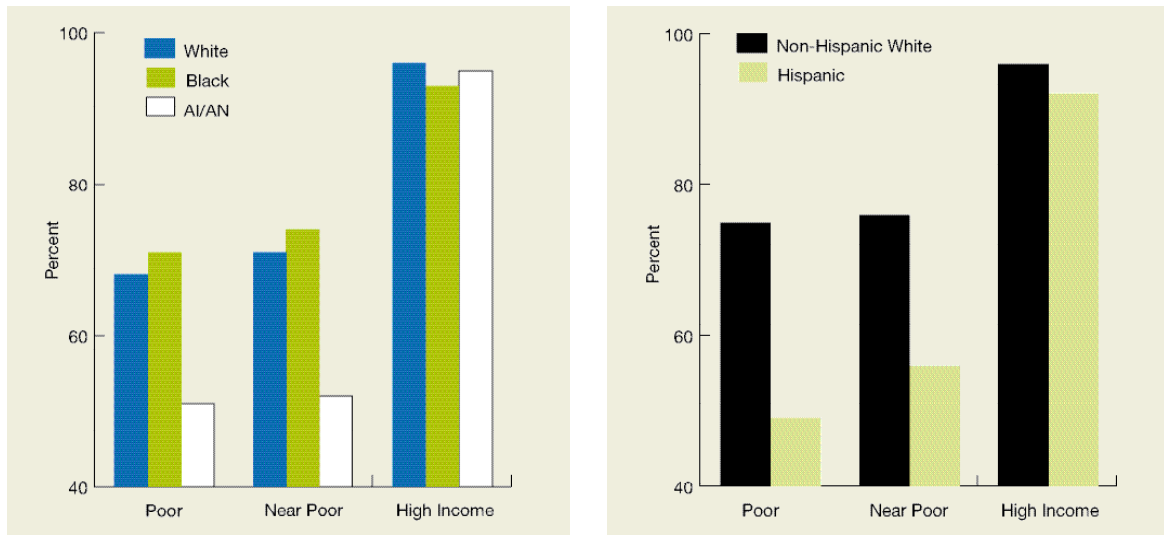
**Note:** Measure is age adjusted. NHIS respondents are asked about health insurance coverage at the time of interview (point-in-time estimate). For findings related to all health insurance measures, see Tables 3.1a and 3.1b.

- For all years, the proportion with insurance was lower among blacks and AI/ANs compared with whites; Hispanics compared with non-Hispanic whites; and poor, near poor, and middle income compared with high income groups (Figure 3.1).
- From 1999-2001, rates of insurance did not change significantly among any racial, ethnic, or income groups.



Racial and ethnic minorities are disproportionately poor. To distinguish the effects of race, ethnicity, and income on health care access, measures are presented by income level.

**Figure 3.2. People under age 65 with health insurance by race (left) and ethnicity (right) stratified by income, 2001**



**Source:** National Health Interview Survey, 2001.

**Reference population:** Civilian, noninstitutionalized people under age 65.

**Note:** Measure is age adjusted. NHIS respondents are asked about health insurance coverage at the time of interview (point-in-time estimate).

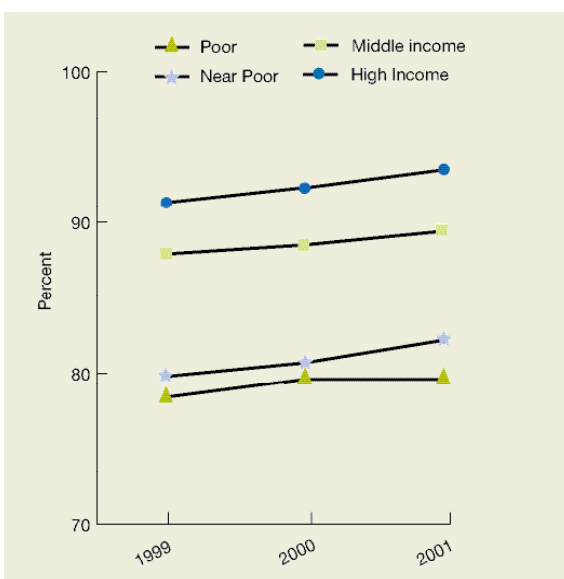
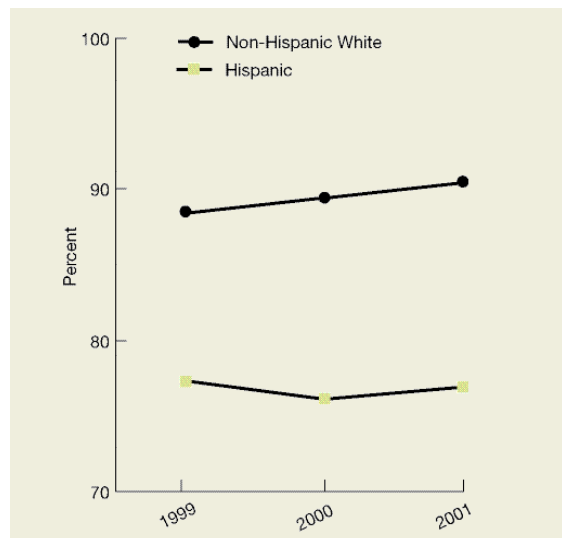
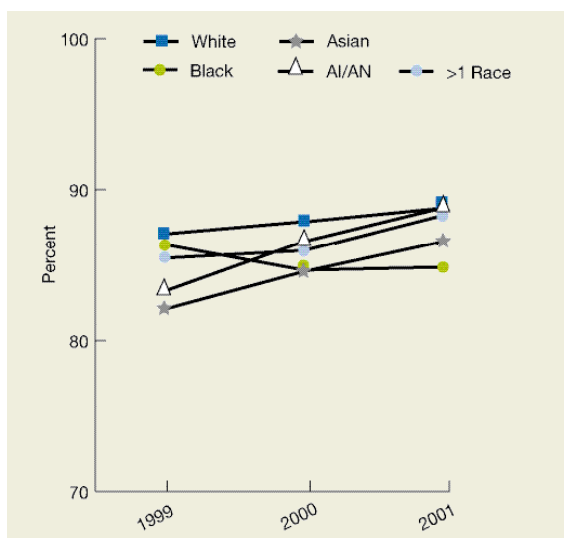
- Income explains some but not all of the differences in rates of insurance among people under age 65 by race and ethnicity.
- While differences in health insurance tend to attenuate or disappear among blacks and among high income individuals, they persist among poor and near poor AI/ANs and Hispanics (Figure 3.2).
- No group achieved the HP2010 goal of 100% of Americans with health insurance.



## Usual Source of Care

Having a usual source of care helps people get into the health care system, yet over 40 million Americans do not have a specific source of ongoing care.<sup>12</sup> People without a usual source of care report more difficulties obtaining needed services<sup>13</sup> and fewer preventive services, including blood pressure monitoring, flu shots, prostate exams, Pap tests, and mammograms.<sup>14</sup>

**Figure 3.3. People with a specific source of ongoing care by race (top left), ethnicity (top right), and income (bottom left), 1999-2001**



**Source:** National Health Interview Survey, 1999-2001.

**Reference population:** Civilian, noninstitutionalized population.

**Note:** Measure is age adjusted. For findings related to all usual source of care measures, see Tables 3.1a and 3.1b.

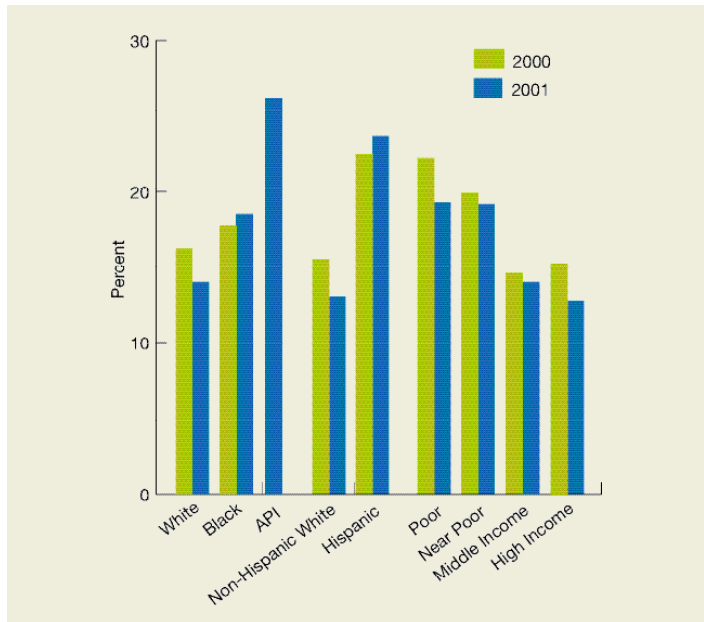
- In all 3 years, the proportion of people with a specific source of ongoing care was lower among Hispanics compared with non-Hispanic whites and among poor, near poor, and middle income groups compared with high income groups; racial differences were not significant (Figure 3.3).
- Between 1999 and 2001, rates of source of ongoing care improved for all groups except AI/AN, multiple race individuals, Hispanics, and the poor.
- No group achieved the HP2010 goal of 96% of Americans with a specific source of ongoing care.



## Patient Perceptions of Need

Patient perceptions of need include perceived difficulties or delays obtaining care and problems getting care as soon as it is wanted. While patients may not always be able to assess their need for care, problems getting care when patients perceive that they are ill or injured likely reflect significant barriers to care.

**Figure 3.4. Adults who can sometimes or never get care for illness or injury as soon as wanted by race, ethnicity, and income, 2000-2001**



**Source:** Medical Expenditure Panel Survey, 2000-2001.

**Reference population:** Civilian, noninstitutionalized people age 18 and over.

**Note:** For findings related to all patient perceptions of need measures, see Tables 3.1a and 3.1b.

- In both 2000 and 2001, the proportion of adults who sometimes or never get care for illness or injury as soon as they wanted was higher among Hispanic compared with non-Hispanic white adults and among poor and near poor compared with high income adults (Figure 3.4).
- The proportion of adults who sometimes or never get care for illness or injury as soon as they wanted was also higher among black and API adults compared with white adults in 2001 (there were too few APIs to provide a reliable estimate in 2000).
- From 2000 to 2001, the proportion of adults who sometimes or never get care for illness or injury as soon as they wanted decreased among white, non-Hispanic white, and high income adults.
- In multivariate models controlling for age, gender, income, education, insurance, and residence location, the black-white difference is attenuated, but other differences persist in 2001. APIs are 99% more likely than whites, Hispanics are 45% more likely than non-Hispanic whites, and the near poor are 47% more likely than high income people to have problems getting care for illness or injury.

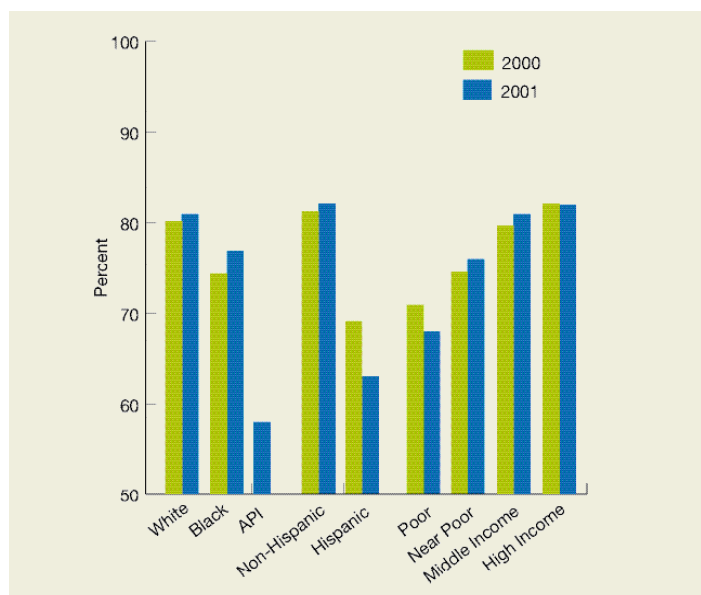


## Getting Care Within the Health Care System

### Difficulty Getting Care

Gaining entry into the health care system does not ensure that patients receive all the services that they need; many patients report difficulties navigating the health care system even after they have gained entry. For example, a quarter of managed care patients report difficulties obtaining referrals to specialists.<sup>15</sup> Difficulty scheduling appointments or reaching the physician via phone, long waiting times for an appointment, and dissatisfaction with physician staff can lead patients<sup>16</sup> and parents of patients<sup>17</sup> to seek non-urgent emergency department (ED) visits. Problems getting care within the health care system can include provider unavailability on nights or weekends; dissatisfaction with professional staff; longer waiting times; and difficulties getting appointments, contacting providers by phone, and getting referrals to specialists.

**Figure 3.5. Adults without problems getting referral to a specialist in the past year by race, ethnicity, and income, 2000-2001**



**Source:** Medical Expenditure Panel Survey, 2000-2001.

**Reference population:** Civilian, noninstitutionalized people age 18 and over.

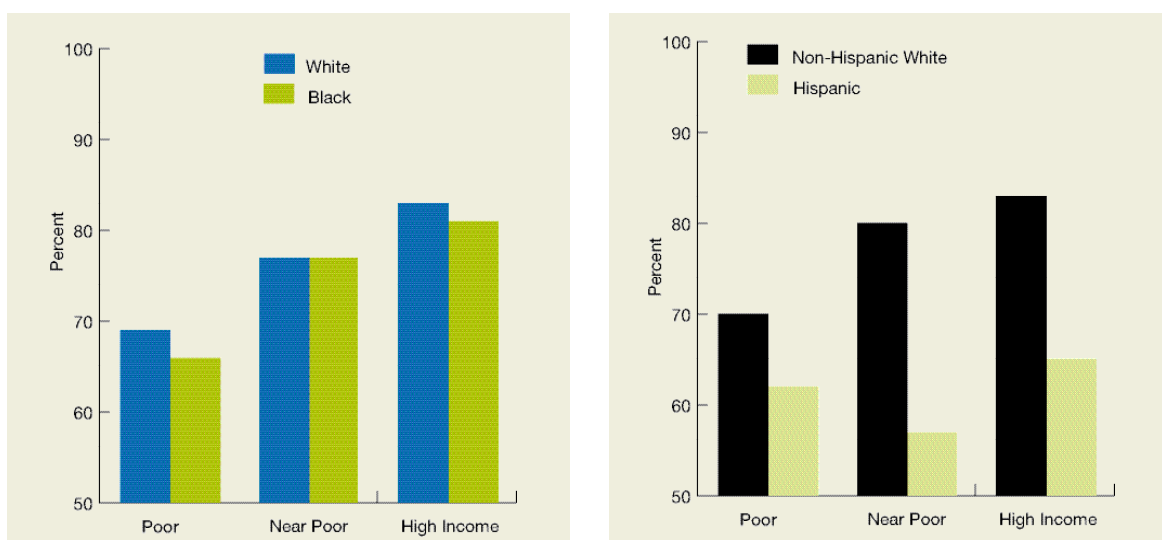
**Note:** For findings related to all measures of getting care within the health care system, see Tables 3.2a and 3.2b.

- From 2000 to 2001, rates of no problems getting a referral decreased among Hispanics but did not change among any other groups (Figure 3.5).
- In 2000 and 2001, the proportion of adults without problems getting a referral to a specialist was lower among Hispanic compared with non-Hispanic white adults and poor and near poor compared with high income adults.
- The proportion of adults without problems getting a referral was also lower among API compared with white adults in 2001 (there were too few APIs to provide a reliable estimate in 2000); black-white differences were not noted.
- In multivariate models controlling for age, gender, income, education, insurance, and residence location, racial, ethnic, and income-related differences persist. APIs are 63% less likely than whites and Hispanics are 47% less likely than non-Hispanic whites to report no problems getting referrals. Compared with high income adults, the poor and near poor are 41% and 28% less likely to report no problems getting referrals, respectively.



To distinguish the effects of race, ethnicity, and income on health care access and to identify populations at greatest risk for difficulties getting care within the health care system, measures are presented by income level.

**Figure 3.6. Adults without problems getting referral to a specialist in the past year by race (left) and ethnicity (right) stratified by income, 2001**



**Source:** Medical Expenditure Panel Survey, 2001.

**Reference population:** Civilian, noninstitutionalized people age 18 and over.

- Income explains some but not all of the differences in rates of problems getting a referral to a specialist among adults by ethnicity.
- Ethnic differences are observed across all income groups (Figure 3.6).



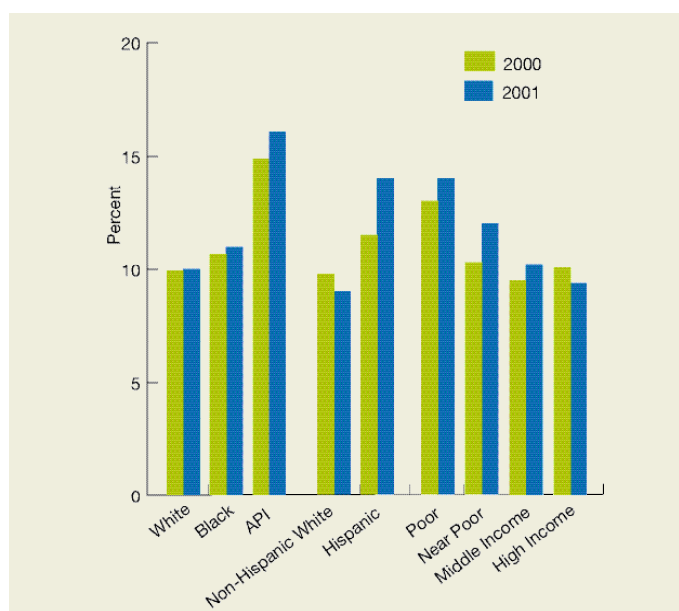


## Patient Perceptions of Care

### Patient-Provider Communication

Accessing health care does not guarantee optimal care if patients and providers do not communicate effectively. Barriers to patient-provider communication are common. About 47 million people speak a language other than English at home; almost half do not speak English very well.<sup>18</sup> A fifth of Americans score at the lowest level of literacy and another quarter score at the next level; understanding health information often requires literacy skills above these levels.<sup>19</sup> Health literacy, the “capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions,”<sup>20</sup> may be an even bigger problem. People with low literacy have less understanding of their medical conditions and health care,<sup>21 22</sup> worse health status,<sup>23</sup> higher use of emergency and inpatient services, and lower adherence to medications and participation in medical decisionmaking.<sup>24</sup> Estimates of health expenditures attributable to low health literacy range from \$29 billion to \$69 billion per year.<sup>25</sup> Providers also differ in communication proficiency; variation in listening skills has been noted.

**Figure 3.7. Adults whose providers sometimes or never listen carefully to them by race, ethnicity, and income, 2000-2001**



**Source:** Medical Expenditure Panel Survey, 2000-2001.

**Reference population:** Civilian, noninstitutionalized people age 18 and over.

**Note:** For findings related to all measures of patient-provider communication, see Tables 3.3a and 3.3b.

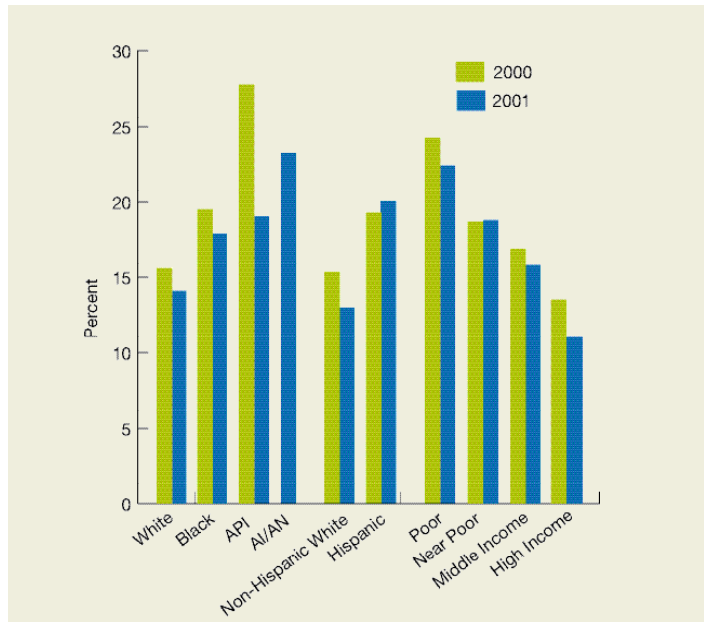
- In 2001, the proportion of adults with providers who sometimes or never listen carefully was higher among API compared with white, Hispanic compared with non-Hispanic white, and poor, near poor, and middle income compared with high income adults; black-white differences were not noted.
- Between 2000 and 2001, rates of adults with providers who sometimes or never listen carefully did not change significantly among any groups.
- In multivariate models controlling for age, gender, income, education, insurance, and residence location, the difference between Hispanic and non-Hispanic whites is attenuated, but other differences persist. APIs are 73% more likely than whites to have providers who sometimes or never listen carefully. Compared with high income adults, poor, near poor, and middle income adults are 52%, 56%, and 37% more likely to have providers who sometimes or never listen carefully, respectively.



## Patient-Provider Relationship

The patient-provider relationship is built upon mutual respect, trust, and understanding. Patient perceptions of the strength of this relationship may be reflected in patient satisfaction and ratings of health care. The first NHDR reported that many racial and ethnic minority groups as well as low SES groups are more likely to rate their overall health care poorly.

**Figure 3.8. Adults who rate their health care in the past year less than 7 on a scale from 0 to 10 by race, ethnicity, and income, 2000-2001**



**Source:** Medical Expenditure Panel Survey, 2000-2001.

**Reference population:** Civilian, noninstitutionalized people age 18 and over.

**Note:** For findings related to all measures of the patient provider relationship, see Tables 3.3a and 3.3b.

- In both 2000 and 2001, the proportion of adults who rate their health care less than 7 on a scale from 0 (worse health care possible) to 10 (best health care possible) was higher among black compared with white adults; Hispanic compared with non-Hispanic white adults; and poor, near poor, and middle income compared with high income adults (Figure 3.8).
- The proportion of adults who rate their health care less than 7 was also higher among AI/AN compared with white adults in 2001 (there were too few AI/AN adults to provide a reliable estimate in 2000).
- Between 2000 and 2001, the proportion of adults who rate their health care less than 7 declined among white, API, non-Hispanic white, and high income adults.
- In multivariate models controlling for age, gender, income, education, insurance, and residence location, all racial and ethnic differences are attenuated, but income-related differences persist. Compared with high income adults, poor, near poor, and middle income adults are 66%, 60%, and 44% more likely to rate their health care less than 7.



## Health Care Utilization

Measures of health care utilization complement patient reports of barriers to care and permit a fuller understanding of access to care. Barriers to care that are associated with differences in health care utilization may be more significant than barriers that do not affect utilization patterns. Many landmark reports on disparities have relied on measures of health care utilization,<sup>26 27 28</sup> and these data demonstrate some of the largest differences in care among diverse groups. More recent efforts to understand and inform health care delivery continue to include measures of health care utilization.<sup>29 30</sup>

Interpreting health care utilization data is more complex than analyzing data on patient perceptions of access to care. Besides access to care, health care utilization is strongly affected by health care need and patient preferences and values. In addition, greater use of services does not necessarily indicate better care. In fact, high use of some inpatient services may reflect impaired access to outpatient services. Hence, the summary table on health care utilization uses a different key from other summary tables of access to care. Rather than indicating better or worse access, symbols on this table simply identify the amount of care received by racial, ethnic, and socioeconomic groups relative to their comparison groups.

Each year, the Nation's 12 million health services workers provide about 820 million office visits and 590 million hospital outpatient visits and treat 35 million hospitalized patients, 2.5 million nursing home residents, 1.4 million home health care patients, and 100,000 people in hospice settings.<sup>31</sup> Each year, about 70% of the civilian noninstitutionalized population visit a medical provider's office or outpatient department, about 60% receive a prescription medication, and about 40% visit a dental provider.<sup>32</sup>

National health expenditures totaled \$1.3 trillion in fiscal year 2002, about 13% of the gross domestic product. Governments account for 43% of the U.S. total, about 33% from the Federal Government in the form of Medicare and Medicaid payments and grants to States and about 10% from State and local governments. After almost a decade of modest growth, health care spending per capita rose 10% in 2001; premiums for private health insurance increased 12.7% in 2002.<sup>33</sup> Health expenditures among the civilian noninstitutionalized population in America are extremely concentrated, with 5% of the population accounting for 55% of outlays.<sup>34</sup> In addition, it has been estimated that as much as \$390 billion a year, almost a third of all health care expenditures, are the result of poor quality care, including overuse, misuse, and waste.<sup>35</sup>

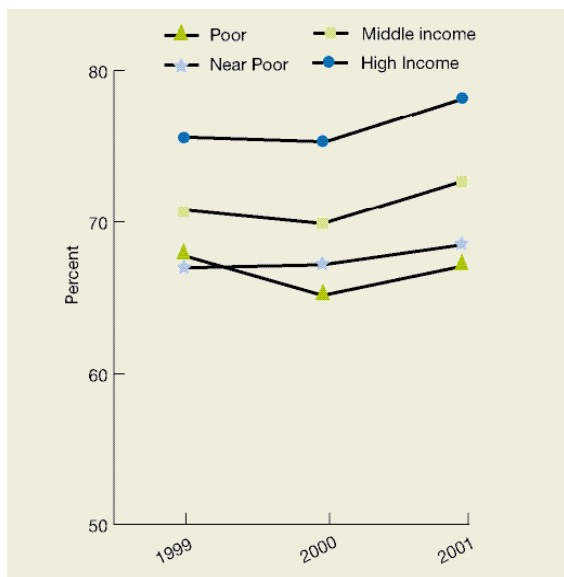
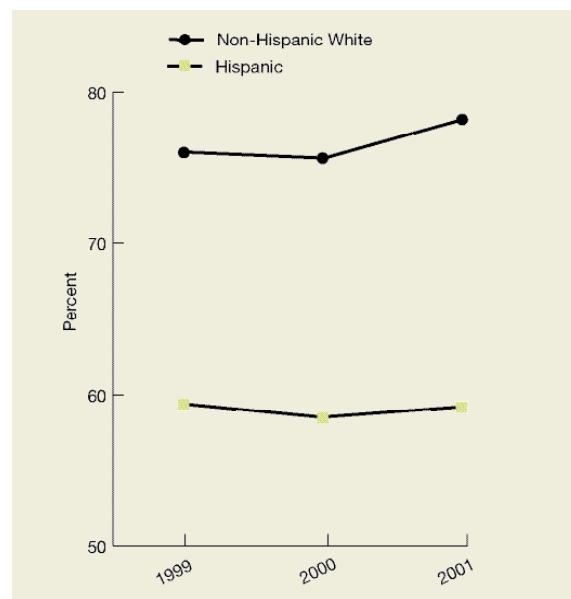
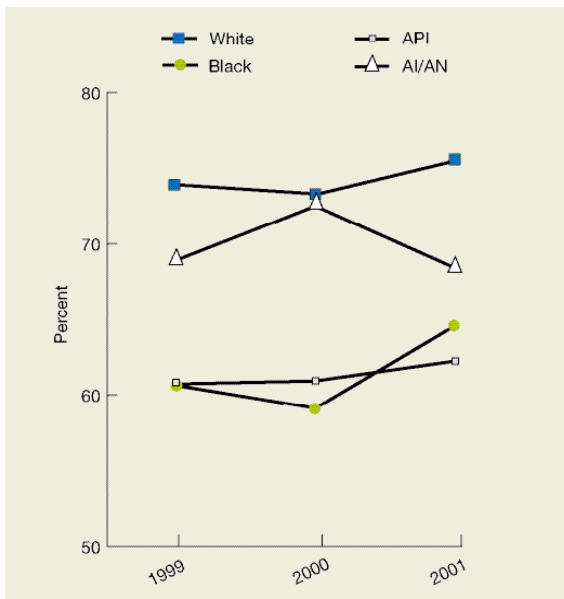
The first NHDR reported that different racial, ethnic, and SES groups had different patterns of health care utilization. Asians and Hispanics tended to have lower use of most health care services including routine care, emergency department visits, avoidable admissions, and mental health care. Blacks tended to have lower use of routine care, outpatient mental health care, and outpatient HIV care but higher use of emergency departments and hospitals, including higher rates of avoidable admissions, inpatient mental health care, and inpatient HIV care. Lower SES individuals tended to have lower use of routine care and outpatient mental health care and higher use of emergency departments, hospitals, and home health care. This year, findings related to select health care utilization measures are highlighted.



## General Medical Care

Many Americans require office or outpatient services, dental services, and prescription medications on a regular basis as well as emergency room and inpatient hospital services at some point in their lives. Lower receipt of office or outpatient visits may indicate better health, patient preferences, or problems with access to services.

**Figure 3.9. People with an office or outpatient visit in past year by race (top left), ethnicity (top right), and income (bottom left), 1999-2001**



**Source:** Medical Expenditure Panel Survey, 1999-2001.

**Reference population:** Civilian, noninstitutionalized population.

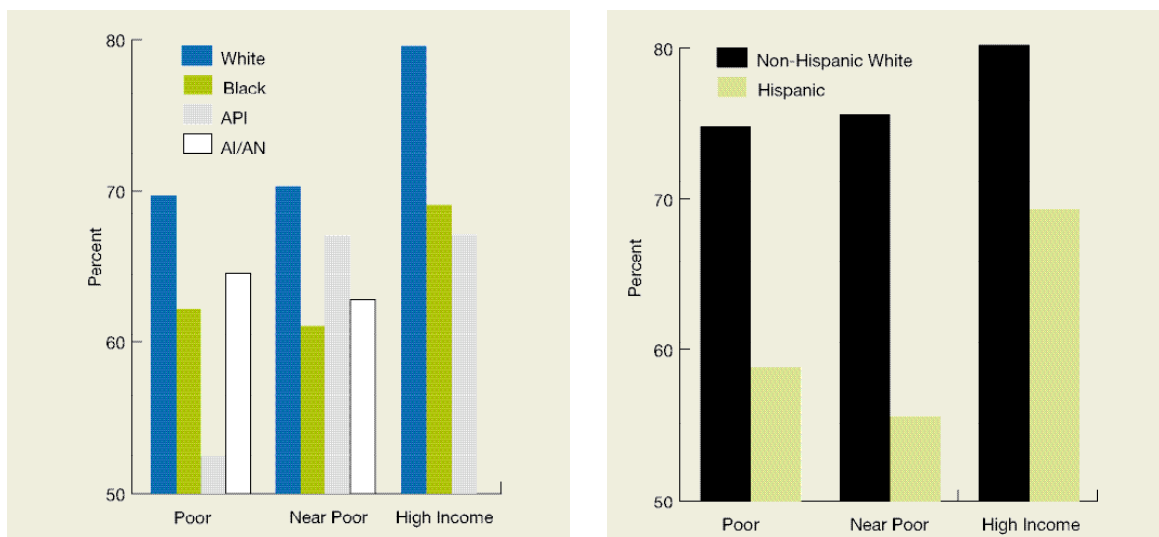
**Note:** For findings related to all routine and acute care measures, see Tables 3.4a and 3.4b.

- In all 3 years, the proportion of people who had an office or outpatient visit in the past year was lower among blacks and APIs than among whites; among Hispanics than among non-Hispanic whites; and among poor, near poor, and middle income groups than among the high income group (Figure 3.9).
- Between 1999 and 2001, rates of office or outpatient use increased among the high income group but did not change significantly among any racial or ethnic groups.



To distinguish the effects of race, ethnicity, and income on health care utilization and to identify populations at greatest risk for barriers to health care utilization, measures are presented by income level.

**Figure 3.10. People with an office or outpatient visit in past year by race (left) and ethnicity (right) stratified by income, 2001**



**Source:** Medical Expenditure Panel Survey, 2001.

**Reference population:** Civilian noninstitutionalized population.

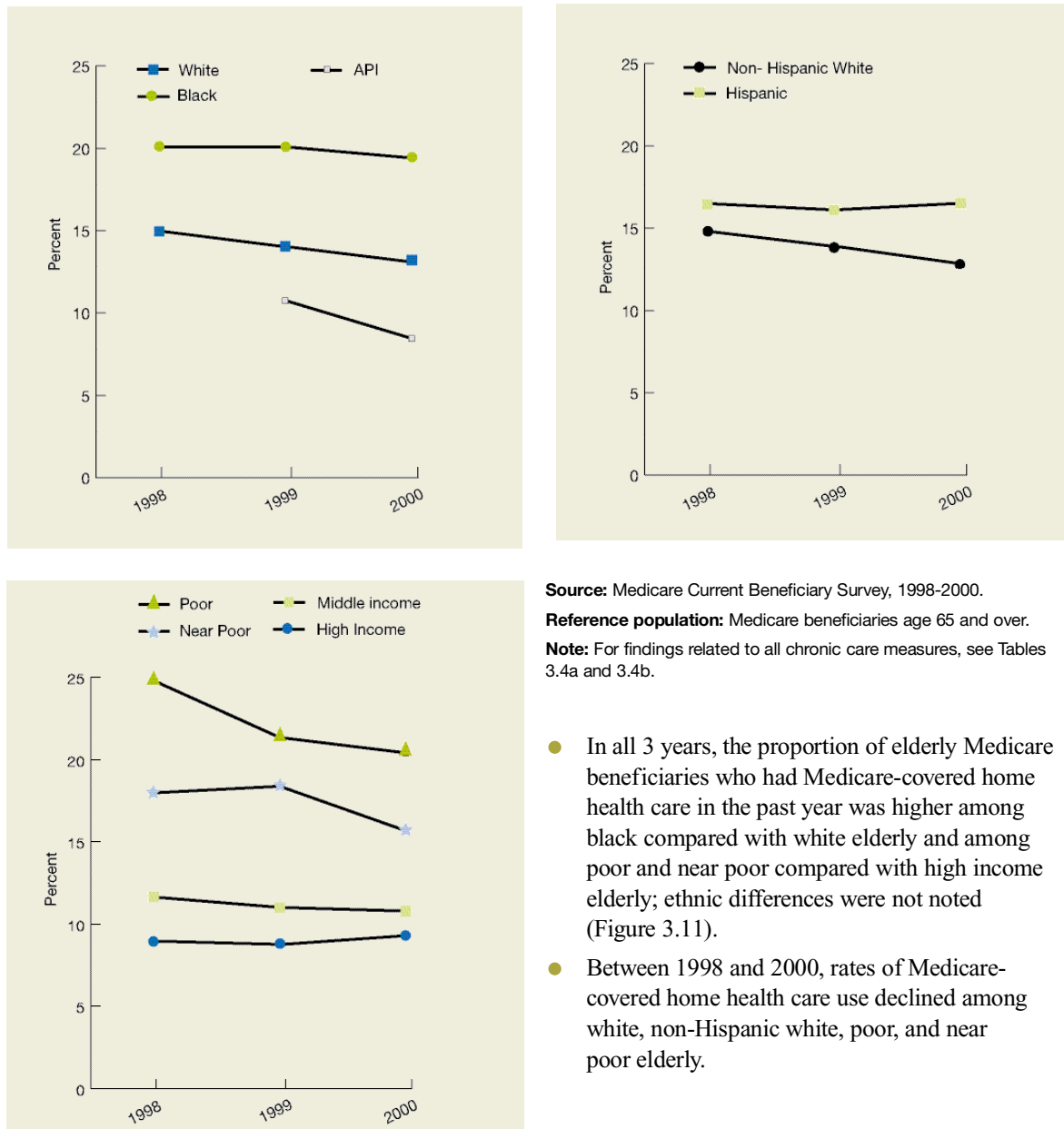
- Income explains some but not all of the differences in health care utilization by race and ethnicity.
- Racial and ethnic differences are observed across all income groups (Figure 3.10).



## Nursing Home and Home Health Care

Nursing home and home health care includes the provision of personal, social, and medical services to people who have functional or cognitive limitations in their ability to perform self-care and other activities necessary to live independently. This NHDR reports on data from the CMS Medicare Current Beneficiary Survey to provide estimates of nursing home and Medicare-covered home health care by race, ethnicity, and SES.

**Figure 3.11. Medicare beneficiaries 65 and older with Medicare-covered home health care in past year by race (top left), ethnicity (top right), and income (bottom left), 1998-2000**



**Source:** Medicare Current Beneficiary Survey, 1998-2000.

**Reference population:** Medicare beneficiaries age 65 and over.

**Note:** For findings related to all chronic care measures, see Tables 3.4a and 3.4b.

- In all 3 years, the proportion of elderly Medicare beneficiaries who had Medicare-covered home health care in the past year was higher among black compared with white elderly and among poor and near poor compared with high income elderly; ethnic differences were not noted (Figure 3.11).
- Between 1998 and 2000, rates of Medicare-covered home health care use declined among white, non-Hispanic white, poor, and near poor elderly.



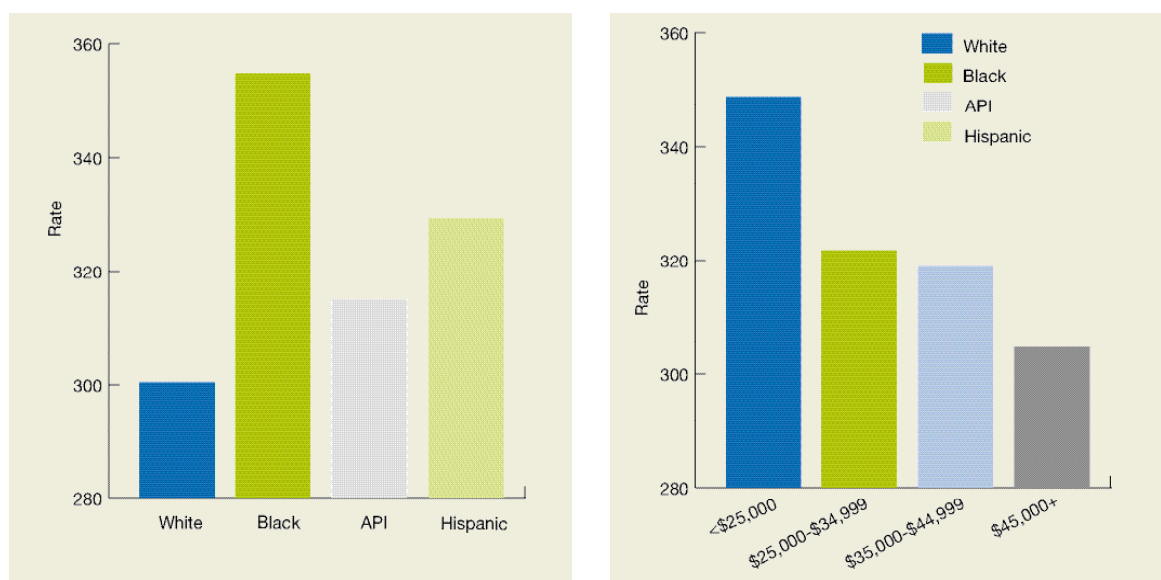
## Avoidable Admissions

Avoidable admissions are hospitalizations that potentially could have been averted by high quality outpatient care. They relate to conditions for which good outpatient care can prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease. While not all admissions for these conditions can be avoided, rates in populations tend to vary with access to outpatient services. For example, better access to care should facilitate the diagnosis of appendicitis before rupture occurs.

Racial, ethnic, and socioeconomic differences in avoidable admissions are well documented; rates are higher among blacks compared with whites and among low income compared with high income individuals.<sup>36 37 38</sup> As the numbers of avoidable hospitalizations for some conditions increased between 1980 and 1998, the gaps between these demographic groups widened.<sup>39</sup>

Avoidable hospitalizations tracked in the NHDR include hospitalizations for hypertension, angina, chronic obstructive pulmonary disease, bacterial pneumonia, and perforated appendix and come from AHRQ's Healthcare Cost and Utilization Project State Inpatient Databases disparities analysis file. This file is designed to provide national estimates using weighted records from a sample of hospitals from 22 States that have 63% of U.S. hospital discharges. These 22 States participate in HCUP and have relatively complete race and ethnicity data.

**Figure 3.12. Perforated appendix per 1,000 admissions with appendicitis by race/ethnicity (left) and area income (median income of ZIP Code of residence) (right), 2001**



**Source:** HCUP State Inpatient Databases disparities analysis file, 2001.

**Reference population:** Patients hospitalized with appendicitis.

**Note:** White, Black, and API are non-Hispanic groups. For findings related to all avoidable admissions, see Tables 3.4a and 3.4b.

- In 2001, rates of perforated appendix per 1,000 admissions for appendicitis were higher among blacks and Hispanics compared with non-Hispanic whites and higher among residents of ZIP Codes with median income < \$25,000, \$25,000 to \$34,999, and \$35,000 to \$44,999 compared with residents of ZIP Codes with income \$45,000 and over (Figure 3.12).

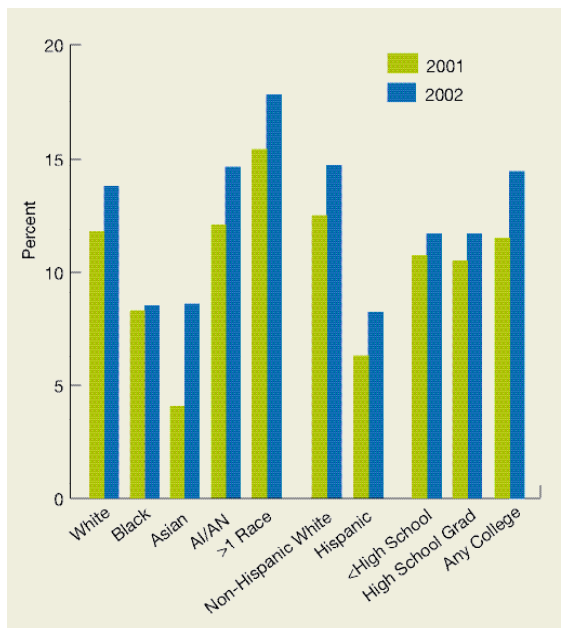




## Mental Health Care and Substance Abuse Treatment

Over 40 million people ages 18 to 64 had a mental disorder in the past year,<sup>40</sup> and about 20 million had a serious mental disorder that substantially limited activities.<sup>41</sup> In 2003, about 16 million Americans age 12 and older were heavy alcohol drinkers and about 54 million had a recent binge drinking episode.<sup>41</sup> About 20 million people age 12 and older were illicit drug users and about 71 million reported recent use of a tobacco product.<sup>41</sup> The direct costs of mental disorders and substance abuse amounted to \$99 billion in 1996; lost productivity and premature death accounted for an additional \$75 billion.<sup>42</sup> Although the prevalence of mental disorders for racial and ethnic minorities in the United States is similar to that for whites,<sup>42</sup> differences in care can be observed. Compared with whites, minorities have less access to mental health care and are less likely to receive needed services.<sup>43</sup> Racial, ethnic, and socioeconomic differences in the use of psychiatric medications;<sup>44</sup> psychiatric outpatient,<sup>45</sup> emergency,<sup>46</sup> and inpatient services;<sup>47</sup> and substance abuse treatment<sup>41</sup> have also been documented. These differences may reflect, in part, variation in preferences and cultural attitudes towards mental health and substance abuse.

**Figure 3.13. Adults who reported they received mental health treatment or counseling in the past year by race, ethnicity, and education, 2001-2002**



**Source:** SAMHSA, National Household Survey on Drug Abuse, 2001, and National Survey on Drug Use and Health, 2002.

**Reference population:** Civilian, noninstitutionalized population age 18 and older.

**Note:** For findings related to all mental health care measures, see Tables 3.4a and 3.4b.

- In both 2001 and 2002, the proportion of adults with mental health treatment or counseling in the past year was lower among blacks and Asians compared with whites and lower among Hispanics compared with non-Hispanic whites (Figure 3.13).
- Between 2001 and 2002, receipt of mental health care treatment or counseling increased among white, Asian, non-Hispanic white, and Hispanic adults and adults with college education.





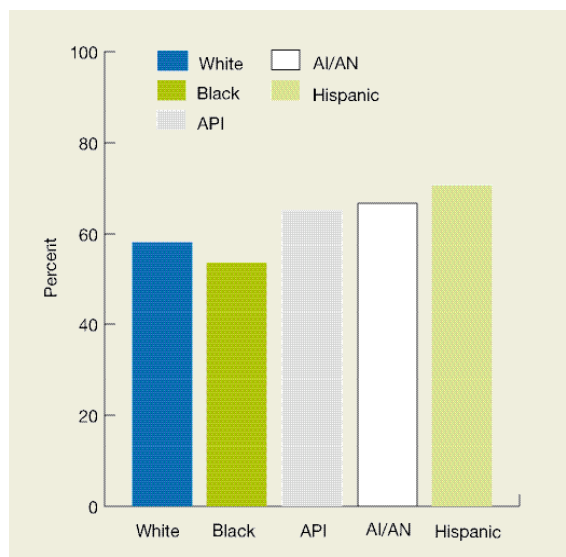
## HIV Care

Between 850,000 and 950,000 individuals are infected with HIV in the United States, an estimated quarter of whom are unaware that they are infected.<sup>48</sup> Each year, about 40,000 people acquire HIV infection.<sup>49 50</sup> Since the use of highly active antiretroviral therapy (HAART) to treat HIV infection became widespread in 1996, new AIDS cases declined from the mid-1990's to 2001 but then leveled off in 2002.<sup>51</sup> Since its emergence, more than 500,000 Americans have died from AIDS, including over 16,000 people in 2002.<sup>51</sup>

AIDS incidence and death rates vary by race and ethnicity. Blacks make up about 12% of the U.S. population, but they accounted for 50% of the new AIDS cases reported in the United States in 2002.<sup>52</sup> Hispanics also have higher AIDS incidence rates compared with whites and accounted for 6,998 of the 40,793 new AIDS cases reported in 2002.<sup>53</sup> AIDS is the leading cause of death among black women 25 to 34 and black men 35 to 44.<sup>54</sup> Racial, ethnic, and socioeconomic differences in care for HIV and AIDS have been documented in, for example, receipt of antiretroviral therapy and therapy to prevent *Pneumocystis pneumonia* (PCP), a common infection among AIDS patients.<sup>55 56 57</sup>

HIV care can include outpatient and inpatient services. Because national data on HIV care are not routinely collected, HIV measures tracked in NHDR come from the HIV Research Network, which consists of 18 medical practices across the United States that treat large numbers of HIV patients. HIV patients typically require four or more ambulatory visits per year to ensure adequate monitoring of their disease with CD4 counts and viral loads.<sup>58</sup>

**Figure 3.14. Adult HIV patients with four or more ambulatory visits in the past year by race/ethnicity, 2001**



**Source:** HIV Research Network, 2001.

**Reference population:** HIV patients age 18 and older receiving care from HIV Research Network providers.

**Note:** White, Black, API, and AI/AN are non-Hispanic groups. For findings related to all HIV care measures, see Tables 3.4a and 3.4b.

- In 2001, the proportion of adults with HIV with four or more ambulatory visits in the past year was lower among black and higher among Hispanic compared with non-Hispanic white HIV patients (Figure 3.14).



**Table 3.1a. Racial and Ethnic Differences in Getting Into the Health Care System**

Measure	Racial Difference <sup>i</sup>					Ethnic Difference <sup>ii</sup>
	Black	Asian	NHOPI	AI/AN	>1 Race	Hispanic
<b>Health Insurance Coverage</b>						
People under 65 with health insurance <sup>iii</sup>	↓	=	=	↓	↓	↓
People under 65 with any private health insurance <sup>iii</sup>	↓	=	=	↓	↓	↓
People 65 and over with any private health insurance <sup>iii</sup>	↓	↓	=	↓	↓	↓
People uninsured all year <sup>iv</sup>	=		↑ <sup>iv</sup>	=		↓
People with any period of uninsurance during the year <sup>iv</sup>	=		= <sup>iv</sup>	=		↓
People with any period of public insurance during the year <sup>iv</sup>	↓		= <sup>iv</sup>	↓		↓
<b>Usual Source of Care</b>						
People who have a specific source of ongoing care <sup>iii</sup>	=	=	=	=	↓	↓
People in fair or poor health who have a specific source of ongoing care <sup>iii</sup>	=	=			=	↓
People with a hospital, emergency room, or clinic as source of ongoing care <sup>iii</sup>	↓	=		↓	=	↓
People without a usual source of care who indicate a financial or insurance reason for not having a source of care <sup>iv</sup>	=					↓
People who have a usual primary care provider <sup>iv</sup>	=		= <sup>iv</sup>	=		↓
<b>Patient Perceptions of Need<sup>iv</sup></b>						
Families that experience difficulties or delays in obtaining health care or do not receive needed care	=		= <sup>iv</sup>	=		↓
Families that experience difficulties or delays in obtaining health care due to financial or insurance reasons	=					=
Families that did not receive a doctor's care or prescription medications because the family needed the money	=					↓
Families not very satisfied that they can get health care if they need it	=		↓ <sup>iv</sup>	=		↓
People who sometimes or never get appointments for routine care as soon as wanted	↓		↓ <sup>iv</sup>	=		↓
People who sometimes or never get care for illness or injury as soon as wanted	↓		↓ <sup>iv</sup>			↓

<sup>i</sup>Compared with whites.

<sup>ii</sup>Compared with non-Hispanic whites.

<sup>iii</sup>Source: National Health Interview Survey, 2001.

<sup>iv</sup>Source: Medical Expenditure Panel Survey, 2001. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asian or Pacific Islander. This source did not collect information for >1 race.

Key: NHOPI=Native Hawaiian or Other Pacific Islander; AI/AN=American Indian or Alaska Native

**Key to Symbols Used in Access to Health Care Tables:**

=: Group and comparison group have about same access to health care.

↑: Group has better access to health care than the comparison group.

↓: Group has worse access to health care than the comparison group.

Blank cell: Reliable estimate for group could not be made.

**Table 3.1b. Socioeconomic Differences in Getting Into the Health Care System**

Measure	Income Difference <sup>i</sup>			Educational Difference <sup>ii</sup>		Insurance Difference <sup>iii</sup>
	<100%	100-199%	200-399%	<HS	HS Grad	Uninsured
<b>Health Insurance Coverage</b>						
People under 65 with health insurance <sup>iv</sup>	↓	↓	↓	↓	↓	
People under 65 with any private health insurance <sup>iv</sup>	↓	↓	↓	↓	↓	
People 65 and over with any private health insurance <sup>iv</sup>	↓	↓	↓	↓	↓	
People uninsured all year <sup>v</sup>	↓	↓	↓	↓	↓	
People with any period of uninsurance during the year <sup>v</sup>	↓	↓	↓	↓	↓	
People with any period of public insurance during the year <sup>v</sup>	↓	↓	↓	↓	↓	
<b>Usual Source of Care</b>						
People who have a specific source of ongoing care <sup>iv</sup>	↓	↓	↓	↓	↓	↓
People in fair or poor health who have a specific source of ongoing care <sup>iv</sup>	↓	↓	=	↓	↓	↓
People with a hospital, emergency room, or clinic as source of ongoing care <sup>iv</sup>	↓	↓	↓	↓	↓	↓
People without a usual source of care who indicate a financial or insurance reason for not having a source of care <sup>v</sup>	↓	↓	↓	↓	↓	↓
People who have a usual primary care provider <sup>v</sup>	↓	↓	↓	↓	=	↓
<b>Patient Perceptions of Need<sup>v</sup></b>						
Families that experience difficulties or delays in obtaining health care or do not receive needed care	↓	↓	↓	↓	=	↓
Families that experience difficulties or delays due to financial or insurance reasons	↓	↓	↓	↓	=	↓
Families that did not receive a doctor's care or prescription medications because the family needed the money	↓	↓	↓	↓	↓	↓
Families not very satisfied that they can get health care if they need it	↓	↓	↓	↓	↓	↓
People who sometimes or never get appointments for routine care as soon as wanted	↓	=	↓	=	↓	↓
People who sometimes or never get care for illness or injury as soon as wanted	↓	↓	=	↓	=	↓

<sup>i</sup>Compared with persons with family incomes 400% of Federal poverty thresholds or above.<sup>ii</sup>Compared with persons with any college education.<sup>iii</sup>Compared with persons under 65 with any private health insurance.<sup>iv</sup>Source: National Health Interview Survey, 2001.<sup>v</sup>Source: Medical Expenditure Panel Survey, 2001.

Key: HS=high school



**Table 3. 2a. Racial and Ethnic Differences in Getting Care Within the Health Care System**

Measure	Racial Difference <sup>i</sup>					Ethnic Difference <sup>ii</sup>
	Black	Asian	NHOPI	AI/AN	>1 Race	Hispanic
<b>Difficulty Getting Care<sup>iii</sup></b>						
People with provider who has office hours nights or weekends	=	= <sup>iii</sup>		↓		=
People with difficulty getting appointments on short notice	↑	= <sup>iii</sup>		=		↓
People with difficulty contacting provider over the telephone	↑	= <sup>iii</sup>		↓		↓
Adults without problems getting referral to a specialist in past year	=	↓ <sup>iii</sup>				↓
People not very satisfied with professional staff at provider's office	=	↓ <sup>iii</sup>		↓		↓
People who usually wait over 30 minutes before seeing provider	↓	= <sup>iii</sup>		=		↓

**Table 3.2b. Socioeconomic Differences in Getting Care Within the Health Care System**

Measure	Income Difference <sup>iv</sup>			Educational Difference <sup>v</sup>		Insurance Difference <sup>vi</sup>
	<100%	100-199%	200-399%	<HS	HS Grad	Uninsured
<b>Difficulty Getting Care<sup>iii</sup></b>						
People with provider who has office hours nights or weekends	↓	↓	=	=	=	↓
People with difficulty getting appointments on short notice	=	=	=	↑	↑	=
People with difficulty contacting provider over the telephone	=	=	=	=	=	=
Adults without problems getting referral to a specialist in past year	↓	↓	=	↓	=	↓
People not very satisfied with professional staff at provider's office	=	=	=	=	=	=
People who usually wait over 30 minutes before seeing provider	↓	↓	↓	↓	=	↓

<sup>i</sup>Compared with whites.

<sup>ii</sup>Compared with non-Hispanic whites.

<sup>iii</sup>Source: Medical Expenditure Panel Survey, 2001. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asian or Pacific Islander. This source did not collect information for >1 race.

<sup>iv</sup>Compared with persons with family incomes 400% of Federal poverty thresholds or above.

<sup>v</sup>Compared with persons with any college education.

<sup>vi</sup>Compared with persons under 65 with any private health insurance.

Key: NHOPI=Native Hawaiian or Other Pacific Islander; AI/AN=American Indian or Alaska Native; HS=high school

**Key to Symbols Used in Access to Health Care Tables:**

=: Group and comparison group have about same access to health care.

↑: Group has better access to health care than the comparison group.

↓: Group has worse access to health care than the comparison group.

Blank cell: Reliable estimate for group could not be made.



Table 3.3a. Racial and Ethnic Differences in Patient Perceptions of Care

Measure	Racial Difference <sup>i</sup>					Ethnic Difference <sup>ii</sup>
	Black	Asian	NHOPI	AI/AN	>1 Race	Hispanic
<b>Patient-Provider Communication<sup>iii</sup></b>						
People with provider who usually asks about medications and treatments other doctors may give	↑	= <sup>iii</sup>	=			↑
Adults whose providers sometimes or never listened carefully to them	=	↓ <sup>iii</sup>	=			↓
Adults whose providers sometimes or never explained things in a way they could understand	↓	↓ <sup>iii</sup>	=			↓
Adults whose providers sometimes or never showed respect for what they had to say	=	= <sup>iii</sup>	↓			↓
<b>Patient-Provider Relationship<sup>iii</sup></b>						
People not satisfied with quality of care received from provider	=	↓ <sup>iii</sup>	↓			↓
Adults whose providers sometimes or never spent enough time with them	=	↓ <sup>iii</sup>	↓			↓
Adults who rate their health care in the past year <7 on a scale from 0 to 10	↓	= <sup>iii</sup>	↓			↓

<sup>i</sup>Compared with whites.<sup>ii</sup>Compared with non-Hispanic whites.<sup>iii</sup>Source: Medical Expenditure Panel Survey, 2001. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asian or Pacific Islander. This source did not collect information for >1 race.

Key: NHOPI=Native Hawaiian or Other Pacific Islander; AI/AN=American Indian or Alaska Native

**Key to Symbols Used in Access to Health Care Tables:**

= Group and comparison group have about same access to health care.

↑ Group has better access to health care than the comparison group.

↓ Group has worse access to health care than the comparison group.

Blank cell: Reliable estimate for group could not be made.



**Table 3.3b. Socioeconomic Differences in Patient Perceptions of Care**

Measure	Income Difference <sup>i</sup>			Educational Difference <sup>ii</sup>		Insurance Difference <sup>iii</sup>
	<100%	100-199%	200-399%	<HS	HS Grad	Uninsured
<b>Patient-Provider Communication<sup>iv</sup></b>						
People with provider who usually asks about medications and treatments other doctors may give	=	=	=	=	↓	↑
Adults whose providers sometimes or never listened carefully	↓	↓	↓	↓	=	↓
Adults whose providers sometimes or never explained things in a way they could understand	↓	↓	↓	↓	↓	↓
Adults whose providers sometimes or never showed respect for what they had to say	↓	↓	↓	↓	↓	↓
<b>Patient-Provider Relationship<sup>iv</sup></b>						
People not satisfied with quality of care from provider	↓	↓	↓	=	=	↓
Adults whose providers sometimes or never spent enough time	↓	↓	↓	↓	=	↓
Adults who rate their health care in the past year <7 on a scale from 0 to 10	↓	↓	↓	↓	↓	↓

<sup>i</sup>Compared with persons with family incomes 400% of Federal poverty thresholds or above.

<sup>ii</sup>Compared with persons with any college education.

<sup>iii</sup>Compared with persons under 65 with any private health insurance.

<sup>iv</sup>Source: Medical Expenditure Panel Survey, 2001.

Key: HS=high school

**Key to Symbols Used in Access to Health Care Tables:**

=: Group and comparison group have about same access to health care.

↑ Group has better access to health care than the comparison group.

↓ Group has worse access to health care than the comparison group.

Blank cell: Reliable estimate for group could not be made.



Table 3.4a. Racial and Ethnic Differences in Health Care Utilization

Measure	Racial Difference <sup>i</sup>					Ethnic Difference <sup>ii</sup>
	Black	Asian	NHOPI	AI/AN	>1 Race	Hispanic
<b>General Medical Care</b>						
People with an office or outpatient visit in the past year <sup>iii</sup>	↓	↓ <sup>iii</sup>		↓		↓
People with a prescription medication in the past year <sup>iii</sup>	↓	↓ <sup>iii</sup>		=		↓
People with a dental visit in the past year <sup>iii</sup>	↓	↓ <sup>iii</sup>		↓		↓
People with an emergency room visit in the past year <sup>iii</sup>	↑	↓ <sup>iii</sup>		↑		↓
People with an inpatient discharge in the past year <sup>iii</sup>	=	↓ <sup>iii</sup>		=		↓
Outpatient visits per 100 population <sup>iv</sup>	↓	= <sup>iv</sup>		↓		
Emergency department visits per 100 population <sup>iv</sup>	↑	↓ <sup>iv</sup>		↓		
Total hospitalizations per 100 population <sup>v</sup>	↑					
<b>Nursing Home and Home Health Care<sup>vi</sup></b>						
Medicare beneficiaries 65 and over with Medicare-covered home health care	↑ <sup>vi</sup>	↓ <sup>vi</sup>				↑
Medicare beneficiaries under 65 with Medicare-covered home health care	↓ <sup>vi</sup>					=
Medicare beneficiaries 65 and over with nursing home care in the past year	= <sup>vi</sup>					↓
Medicare beneficiaries under 65 with nursing home care in the past year	↓ <sup>vi</sup>					
<b>Avoidable Admissions<sup>vii</sup></b>						
Admissions for hypertension per 100,000 population 18 and older	↑ <sup>vii</sup>	= <sup>vii</sup>				↑
Admissions for angina per 100,000 population 18 and older	↑ <sup>vii</sup>	↓ <sup>vii</sup>				=
Admissions for chronic obstructive pulmonary disease per 100,000 population 18 and older	= <sup>vii</sup>	↓ <sup>vii</sup>				↓
Admissions for bacterial pneumonia per 100,000 population	↑ <sup>vii</sup>	↓ <sup>vii</sup>				=
Admissions for perforated appendix per 1,000 admissions with appendicitis	↑ <sup>vii</sup>	= <sup>vii</sup>				↑

<sup>i</sup>Compared with whites.<sup>ii</sup>Compared with non-Hispanic whites.<sup>iii</sup>Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2001. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asians or Pacific Islanders. This source did not collect information for >1 race.<sup>iv</sup>Source: National Center for Health Statistics, National Ambulatory Medical Care Survey/National Hospital Ambulatory Medical Care Survey, 2000-2001. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asians or Pacific Islanders. This source did not collect information for >1 race. Missing rates preclude analysis by ethnicity.<sup>v</sup>Source: National Center for Health Statistics National Hospital Discharge Survey, 2001. This source did not collect information for >1 race separately. Missing rates preclude analysis by ethnicity.<sup>vi</sup>Source: Medicare Current Beneficiary Survey, 2000. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asians or Pacific Islanders. This source did not collect information for >1 race.<sup>vii</sup>Source: HCUP SID disparities analysis file, 2001. This source categorizes race/ethnicity very differently from other sources. Race/ethnicity information is categorized as a single item: Non-Hispanic white, Non-Hispanic black, Hispanic, Asian or Pacific Islander. These contrasts compare each group with non-Hispanic whites.

Key: NHOPI=Native Hawaiian or Other Pacific Islander; AI/AN=American Indian or Alaska Native



**Table 3.4a. Racial and Ethnic Differences in Health Care Utilization (continued)**

Measure	Racial Difference <sup>i</sup>					Ethnic Difference <sup>ii</sup>
	Black	Asian	NHOPI	AI/AN	>1 Race	Hispanic
<b>Mental Health Care and Substance Abuse Treatment<sup>iii</sup></b>						
Adults who received mental health treatment or counseling in the past year	↓	↓		=	=	↓
Adults who received outpatient mental health treatment or counseling	↓	=		=	=	↓
Adults who received prescription medications for mental health treatment	↓	↓		=	=	↓
Adults who received inpatient mental health treatment or counseling	↑					=
Adults with serious mental illness who received mental health treatment or counseling	↓					↓
People age 12 and older who received illicit drug or alcohol abuse treatment in the past year	↑				=	=
People age 12 and older who needed treatment for illicit drug use and who received such treatment in the past year	=					=
<b>HIV Care</b>						
Hospitalizations for HIV per 10,000 population <sup>iv</sup>	↑					
HIV patients with 4 or more ambulatory visits in the past year <sup>v</sup>	↑ <sup>v</sup>	= <sup>v</sup>		=		↑
HIV patients with CD4 <50 with 4 or more ambulatory visits in the past year <sup>v</sup>	= <sup>v</sup>					=
HIV patients with an inpatient hospitalization in the past year <sup>v</sup>	↑ <sup>v</sup>	= <sup>v</sup>		=		↑
HIV patients with CD4 <50 with an inpatient hospitalization in the past year <sup>v</sup>	= <sup>v</sup>					=

<sup>i</sup>Compared with whites.

<sup>ii</sup>Compared with non-Hispanic whites.

<sup>iii</sup>Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2002.

<sup>iv</sup>Source: National Center for Health Statistics, National Hospital Discharge Survey, 2001. This source did not collect information for >1 race separately.

Missing rates preclude analysis by ethnicity.

<sup>v</sup>Source: HIV Research Network, 2001. This source categorizes race/ethnicity very differently from other sources. Race/ethnicity information is categorized as a single item: non-Hispanic white, non-Hispanic black, Hispanic, Asian or Pacific Islander, American Indian or Alaska Native. These contrasts compare each group with non-Hispanic whites.

NHOPI=Native Hawaiian or Other Pacific Islander; AI/AN=American Indian or Alaska Native

**Key to Symbols Used in Health Care Utilization Tables:  
(Note difference from other Access to Health Care Tables):**

=: Group and comparison group receive about same amount of health care.

↑ Group receives more health care than the comparison group.

↓ Group receives less health care than the comparison group.

Blank cell: Reliable estimate for group could not be made.





Table 3.4b. Socioeconomic Differences in Health Care Utilization

Measure	Income Difference <sup>i</sup>			Educational Difference <sup>ii</sup>		Insurance Difference <sup>iii</sup>
	<100%	100-199%	200-399%	<HS	HS Grad	Uninsured
<b>General Medical Care<sup>iv</sup></b>						
People with an office or outpatient visit in the past year	↓	↓	↓	↓	↓	↓
People with a prescription medication in the past year	↓	↓	↓	↓	=	↓
People with a dental visit in the past year	↓	↓	↓	↓	↓	↓
People with an emergency room visit in the past year	↑	↑	↑	↑	↑	=
People with an inpatient discharge in the past year	↑	↑	↑	↑	↑	↓
<b>Nursing Home and Home Health Care<sup>v</sup></b>						
Medicare beneficiaries 65 and over with Medicare-covered home health care	↑	↑	=			
Medicare beneficiaries 65 and over with nursing home care in past year	↑	↑	=			
<b>Mental Health Care and Substance Abuse Treatment<sup>vi</sup></b>						
Adults who received mental health treatment or counseling in the past year				↓	↓	
Adults who received outpatient mental health treatment or counseling				↓	↓	
Adults who received prescription medications for mental health treatment				↓	↓	
Adults who received inpatient mental health treatment or counseling				↑	↑	
Adults with serious mental illness who received mental health treatment or counseling				↓	↓	
People age 12 and older who received illicit drug or alcohol abuse treatment in the past year				↑	↑	
People age 12 and older who needed treatment for illicit drug use and who received such treatment in the past year				↑	↑	

<sup>i</sup>Compared with persons with family incomes 400% of Federal poverty threshold or above.

<sup>ii</sup>Compared with persons with any college education.

<sup>iii</sup>Compared with persons under 65 with any private health insurance.

<sup>iv</sup>Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2001.

<sup>v</sup>Source: Medicare Current Beneficiary Survey, 2000. This source did not collect information on Asians and NHOPIs separately but in aggregate as Asians or Pacific Islanders. This source did not collect information for >1 race.

<sup>vi</sup>Source: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health, 2002. Income and insurance disparities were not analyzed.

Key: HS=high school

**Key to Symbols Used in Health Care Utilization Tables:**  
(Note difference from other Access to Health Care Tables):

=: Group and comparison group receive about same amount of health care.

↑ Group receives more health care than the comparison group.

↓ Group receives less health care than the comparison group.

Blank cell: Reliable estimate for group could not be made.



## References

- <sup>1</sup>Institute of Medicine, Committee on Monitoring Access to Personal Health Care Services. Access to Health Care in America. Millman M. (Ed.). Washington, DC: National Academy Press; 1993.
- <sup>2</sup>Bieman AS, Magari ES, Jette AM, Splaine M, Wasson JH. Assessing access as a first step toward improving the quality of care for very old adults. *J Ambul Care Manage*. 1998 Jul;21(3):17-26.
- <sup>3</sup>Mills RJ, Bhandari S. Health insurance coverage in the United States: 2002. Current Population Reports P60-223. Washington, DC: U.S. Census Bureau; 2003.
- <sup>4</sup>Institute of Medicine. Care Without Coverage: Too Little, Too Late. Washington, DC: National Academy Press; 2002.
- <sup>5</sup>McWilliams JM, Zaslavsky AM, Meara E, Ayanian JZ. Health insurance coverage and mortality among the near-elderly. *Health Aff (Millwood)*. 2004 Jul-Aug;23(4):223-33.
- <sup>6</sup>Self-assessed health status and selected behavioral risk factors among persons with and without health-care coverage--United States, 1994-1995. *MMWR Morb Mortal Wkly Rep*. 1998 Mar 13;47(9):176-80.
- <sup>7</sup>Franks P, Clancy CM, Gold MR, Nutting PA. Health insurance and subjective health status: data from the 1987 National Medical Expenditure survey. *Am J Public Health*. 1993 Sep;83(9):1295-9.
- <sup>8</sup>Miller W, Vigdor ER, Manning WG. Covering the uninsured: what is it worth? *Health Aff (Millwood)*—Web Exclusive. 2004 Mar 31;W4:157-167.
- <sup>9</sup>Freeman HE, Aiken LH, Blendon RJ, Corey CR. Uninsured working-age adults: characteristics and consequences. *Health Serv Res*. 1990 Feb;24(6):811-23.
- <sup>10</sup>Hadley J. Sicker and Poorer: The Consequences of Being Uninsured. Paper prepared for the Kaiser Commission on Medicaid and the Uninsured. Washington, DC: The Urban Institute; May 2002 (updated February 2003). Executive summary available at: [http://www.kff.org/uninsured/upload/13970\\_1.pdf](http://www.kff.org/uninsured/upload/13970_1.pdf)
- <sup>11</sup>Hadley J, Steinberg EP, Feder J. Comparison of uninsured and privately insured hospital patients. Condition on admission, resource use, and outcome. *JAMA*. 1991 Jan 16;265(3):374-9.
- <sup>12</sup>U.S. Department of Health and Human Services. Healthy People 2010 (2nd ed.) 2 vols. Washington, DC: U.S. Govt. Print. Off.; November 2000, p. 45.
- <sup>13</sup>The Importance of Having a Usual Source of Health Care. One-Pager Number 2, January 2000; The Robert Graham Center: Policy Studies in Family Practice and Primary Care; January 2000. Available at: [www.aafppolicy.org/x149.xml](http://www.aafppolicy.org/x149.xml)
- <sup>14</sup>The Importance of Primary Care Physicians as the Usual Source of Healthcare in the Achievement of Prevention Goals. One-Pager No. 4. Washington, DC: The Robert Graham Center: Policy Studies in Family Practice and Primary Care; February 2000. Available at: <http://www.aafppolicy.org/x159.xml>
- <sup>15</sup>Grunbach K, Selby JV, Damberg C, Bindman AB, Quesenberry C Jr, Truman A, Uratsu C. Resolving the gatekeeper conundrum: what patients value in primary care and referrals to specialists. *JAMA*. 1999 Jul 21;282(3):261-6.
- <sup>16</sup>Sarver JH, Cydulka RK, Baker DW. Usual source of care and nonurgent emergency department use. *Acad Emerg Med*. 2002 Sep;9(9):916-23.
- <sup>17</sup>Brousseau DC, Bergholte J, Gorelick MH. The effect of prior interactions with a primary care provider on nonurgent pediatric emergency department use. *Arch Pediatr Adolesc Med*. 2004 Jan;158(1):78-82.
- <sup>18</sup>Shin HB, Bruno R. Language use and English-speaking ability: 2000. Census 2000 Brief. Washington, DC: U.S. Census Bureau; 2003.
- <sup>19</sup>Kirsch I, Jungeblut A, Jenkins L, Kolstad A. Adult literacy in America: A first look at the findings of the National Adult Literacy Survey. 3rd edition. Washington, DC: U.S. Department of Education; 2002.



- <sup>20</sup>Selden CR, Zorn M, Ratzan S, Parker RM, compilers. Health Literacy: January 1990 through October 1999 [bibliography]. Bethesda, MD: National Library of Medicine, Reference Section; February 2000, p. vi. (Current Bibliographies in Medicine; CBM 2000-1). Available at: <http://www.nlm.nih.gov/pubs/cbm/hliteracy.pdf>. Cited in: U.S. Department of Health and Human Services, Healthy People 2010 (2nd ed.), p. 11-20.
- <sup>21</sup>Williams MV, Baker DW, Parker RM, Nurss JR. Relationship of functional health literacy to patients' knowledge of their chronic disease. A study of patients with hypertension and diabetes. *Arch Intern Med*. 1998 Jan 26;158(2):166-72. Cited in: U.S. Department of Health and Human Services, Healthy People 2010 (2nd ed.), p. 11-9.
- <sup>22</sup>Williams MV, Baker DW, Honig EG, Lee TM, Nowlan A. Inadequate literacy is a barrier to asthma knowledge and self-care. *Chest*. 1998 Oct;114(4):1008-15. Cited in: U.S. Department of Health and Human Services, Healthy People 2010 (2nd ed.), p. 11-9.
- <sup>23</sup>Baker DW, Parker RM, Williams MV, et al. The relationship of patient reading ability to self-reported health and use of health services. *Am J Public Health*. 1997 Jun;87(6):1027-30. Cited in: U.S. Department of Health and Human Services, Healthy People 2010 (2nd ed.), p. 11-9.
- <sup>24</sup>Berkman ND, DeWalt D, Pignone MP, Sheridan SL, Lohr KN, Lux L, Sutton SF, Swinson T, Bonito AJ. Literacy and Health Outcomes. Summary, Evidence Report/Technology Assessment No. 87. Rockville, MD: Agency for Healthcare Research and Quality; 2004.
- <sup>25</sup>Committee on Health Literacy, Institute of Medicine. Health Literacy: A Prescription to End Confusion. Washington, DC: National Academies Press; 2004.
- <sup>26</sup>Trevino FM, Moss AJ. Health Indicators for Hispanic, Black and White Americans. September 1984. 88pp. (PHS) 84-1576. PB87-156956. PC A05 MF A02.
- <sup>27</sup>U.S. Department of Health and Human Services. Report of the Secretary's Task Force on Black and Minority Health. Washington, D.C: DHHS, 1985.
- <sup>28</sup>Institute of Medicine. Access to Health Care in America. Washington, D.C: National Academy Press, 1993.
- <sup>29</sup>National Quality Forum. Improving Healthcare Quality for Minority Patients. Washington, D.C: NQR, 2002.
- <sup>30</sup>Institute of Medicine, Committee on Guidance for Designing a National Healthcare Disparities Report. Guidance for the National Healthcare Disparities Report. Swift EK (Ed.). Washington, DC: National Academies Press; 2002. p. 20.
- <sup>31</sup>National Center for Health Statistics. Health, United States, 2002: With Chartbook on Trends in the Health of Americans. Hyattsville, MD: NCHS, 2002.
- <sup>32</sup>Krauss NA, Machlin S, Kass BL. Use of health care services, 1996. Rockville (MD): Agency for Health Care Policy and Research; 1999. MEPS Findings No. 7. AHCPR Pub. No. 99-0018.
- <sup>33</sup>Strunk BC, Ginsburg PB, Gabel JR. Tracking health care costs: Growth accelerates again in 2001. *Health Aff (Millwood)*-Web Exclusive. 2002 Sept 25; W299-W310.
- <sup>34</sup>Berk ML, Monheit AC. The concentration of health care expenditures, revisited. *Health Affairs*. 2001; 20:9-18.
- <sup>35</sup>Midwest Business Group on Health. Reducing the Costs of Poor-Quality Health Care Through Responsible Purchasing Leadership; 2003. Available at: <http://www.mbg.org/costquality.html> (accessed October 28, 2004).
- <sup>36</sup>Gaskin DJ, Hoffman C. Racial and ethnic differences in preventable hospitalizations across 10 states. *Med Care Res Rev*. 2000;57 Suppl 1:85-107.
- <sup>37</sup>Blustein J, Hanson K, Shea S. Preventable hospitalizations and socioeconomic status. *Health Aff (Millwood)*. 1998 Mar-Apr;17(2):177-89.
- <sup>38</sup>Culler SD, Parchman ML, Przybylski M. Factors related to potentially preventable hospitalizations among the elderly. *Med Care*. 1998 Jun;36(6):804-17.
- <sup>39</sup>Kozak LJ, Hall MJ, Owings MF. Trends in avoidable hospitalizations, 1980-1998. *Health Aff (Millwood)*. 2001 Mar-Apr;20(2):225-32.



- <sup>40</sup>Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen HU, Kendler KS. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Arch Gen Psychiatry*. 1994 Jan;51(1):8-19.
- <sup>41</sup>Substance Abuse and Mental Health Services Administration. 2003 National Survey on Drug Use and Health: Results; 2004. Available at: <http://oas.samhsa.gov/nhsda/2k3nsduh/2k3Results.htm>
- <sup>42</sup>Substance Abuse and Mental Health Services Administration and National Institutes of Health. Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services; 1999. Online version available at: <http://www.mentalhealth.org/features/surgeongeneralreport/home.asp>
- <sup>43</sup>Substance Abuse and Mental Health Services Administration, Office of the Surgeon General. Mental Health: Culture, Race, Ethnicity. Supplement to Mental Health: Report of the Surgeon General. Executive Summary; 2001. Available at: <http://www.mentalhealth.org/cre/execsummary.asp>
- <sup>44</sup>Melfi CA, Croghan TW, Hanna MP, Robinson RL. Racial variation in antidepressant treatment in a Medicaid population. *J Clin Psychiatry*. 2000 Jan;61(1):16-21.
- <sup>45</sup>Kales HC, Blow FC, Bingham CR, Roberts JC, Copeland LA, Mellow AM. Race, psychiatric diagnosis, and mental health care utilization in older patients. *Am J Geriatr Psychiatry*. 2000 Fall;8(4):301-9.
- <sup>46</sup>Segal SP, Bola JR, Watson MA. Race, quality of care, and antipsychotic prescribing practices in psychiatric emergency services. *Psychiatr Serv*. 1996 Mar;47(3):282-6.
- <sup>47</sup>Chung H, Mahler JC, Kakuma T. Racial differences in treatment of psychiatric inpatients. *Psychiatr Serv*. 1995 Jun;46(6):586-91.
- <sup>48</sup>Fleming PL, et al.. HIV Prevalence in the United States, 2000. 9th Conference on Retroviruses and Opportunistic Infections, Seattle, WA, Feb. 24-28, 2002. Abstract 11.
- <sup>49</sup>HIV and AIDS--United States, 1981-2000. *MMWR Morb Mortal Wkly Rep*. 2001 Jun 1;50(21):430-4.
- <sup>50</sup>Centers for Disease Control and Prevention. HIV Prevention Strategic Plan through 2005. Atlanta, GA: CDC, National Center for HIV, STD, and TB Prevention; January 2001. Available at: <http://www.cdc.gov/hiv/partners/psp.htm>
- <sup>51</sup>Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2002;14:1-40 [inclusive page numbers]. Available at: <http://www.cdc.gov/hiv/stats/hasr1402.htm>
- <sup>52</sup>Centers for Disease Control and Prevention. HIV/AIDS among African Americans. Key facts. Available at: <http://www.cdc.gov/hiv/pubs/facts/afam.htm>
- <sup>53</sup>Centers for Disease Control and Prevention. HIV/AIDS Surveillance Report 2002; 14:1-40. Available at: <http://www.cdc.gov/hiv/stats/hasrlink.htm>
- <sup>54</sup>Minino AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. *Natl Vital Stat Rep*. 2002 Sep 16;50(15):1-119.
- <sup>55</sup>Moore RD, Stanton D, Gopalan R, Chaisson RE. Racial differences in the use of drug therapy for HIV disease in an urban community. *N Engl J Med*. 1994 Mar 17;330(11):763-8.
- <sup>56</sup>Shapiro MF, Morton SC, McCaffrey DF, Senterfitt JW, Fleishman JA, Perlman JF, Athey LA, Keesey JW, Goldman DP, Berry SH, Bozzette SA. Variations in the care of HIV-infected adults in the United States: results from the HIV Cost and Services Utilization Study. *JAMA*. 1999 Jun 23-30;281(24):2305-15.
- <sup>57</sup>Bennett CL, Horner RD, Weinstein RA, Dickinson GM, DeHovitz JA, Cohn SE, Kessler HA, Jacobson J, Goetz MB, Simberkoff M, et al. Racial differences in care among hospitalized patients with *Pneumocystis carinii* pneumonia in Chicago, New York, Los Angeles, Miami, and Raleigh-Durham. *Arch Intern Med*. 1995 Aug 7-21;155(15):1586-92.
- <sup>58</sup>HIV/AIDS Bureau. Clinical Management of the HIV-Infected Adult: A Manual for Midlevel Clinicians. Rockville, MD: Health Resources and Services Administration, 2003.